

SECTION 5 Data Types

Recommended Prior Knowledge Students should have completed Practical Unit 3

Context This section should be the fifth studied by the students. It builds on the knowledge obtained from studying all the previous sections.

Outline This section describes the theory of data structure and types.

section	Learning Outcomes	Suggested Teaching Activities	Online Resources	Other resources
5a	Identify different data types: <ul style="list-style-type: none"> logical/Boolean, alphanumeric/text, numeric (real and integer) date. 	Use appropriate database software e.g. Microsoft Access, to demonstrate the different data types	http://www.supersir.co.uk/data_types.htm http://www.theteacher99.btinternet.co.uk/theteacher/gcse/newgcse/module1/task1.htm	(Walmsley, et. al., 2004, Chapter 5) (Leadbetter, & Wainwright, 2004, 12.5)
5b	Select appropriate data types for a given set of data: <ul style="list-style-type: none"> logical/Boolean, alphanumeric/text, numeric date. 	Create a simple flat file database setting all data types to 'text'. Then discuss with students which data type would be most suitable for each field. Ensure you have fields which will match each data type.	http://www.supersir.co.uk/data_types.htm http://www.theteacher99.btinternet.co.uk/theteacher/gcse/newgcse/module1/task1.htm	(Walmsley, et. al., 2004, Chpts 5 & 13) (Leadbetter, & Wainwright, 2004, 12.6)
5c	Describe what is meant by the terms <ul style="list-style-type: none"> file, record, field, key field. 	Use a table of data from, say, a geography text book. Equate the table to a file, a row to a record and a column to a field. Show them a typical computer database and go through each of the terms.	http://www.theteacher99.btinternet.co.uk/theteacher/gcse/newgcse/module5/task1.htm http://www.supersir.co.uk/Databases_design.htm http://www.jegsworks.com/Lessons/lesson1-2/lesson2-4database.htm http://www.bbc.co.uk/schools/gcsebitesize/ict/databases/2databasesrev2.shtml	(Walmsley, et. al., 2004, Chapter 5) (Leadbetter, & Wainwright, 2004, 12.4)